The BC Provincial Education Number (PEN): Considerations for Assigning the PEN to Post-Secondary Applicants

October 2004

Prepared by:

Greg Link

555 SEYMOUR STREET
SUITE 709
VANCOUVER, BC
V6B 3H6
CANADA

TEL: 604-412-7700
FAX: 604-683-0576

EMAIL: admin@bccat.bc.ca
WEB: www.bccat.bc.ca

Prepared for and Funded by the

BRITISH COLUMBIA COUNCIL ON
ADMISSIONS & TRANSFER
SUPPORTING BC's EDUCATION SYSTEM

105-04448/

The BC Provincial Education Number (PEN): Considerations for Assigning the PEN to Post-Secondary Applicants

Prepared by:

Greg Link

© Copyright 2004 by the
British Columbia Council on Admissions and Transfer
709 - 555 Seymour Street, Vancouver, BC V6B 3H6 Canada
Phone: (604) 412-7700 Fax: (604) 683-0576
E-Mail: admin@bccat.bc.ca

BCCAT is the official mark of the BC Council on Admissions and Transfer, as published by the Registrar of Trade-marks of the Canadian Intellectual Property Office

This Report is also available
in Adobe Acrobat Portable Document Format (pdf),
from BCCAT Online, the Internet service of the
BC Council on Admissions and Transfer:
www.bccat.bc.ca

Photocopying and further distribution of this document is permitted. Please credit source.

Executive Summary

The BC Council on Admissions and Transfer (BCCAT) has had a long-standing interest in measures of student mobility and the potential of the Provincial Education Number (PEN) being applied in post-secondary institutions at the applicant stage. The Admissions Committee of BCCAT included a project in its 2004/05 Work Plan to conduct a thorough investigation of current and potential uses of the PEN in BC with a focus on the possibility of assigning a valid PEN to all applicants to public post-secondary institutions (PSIs). The results of the PEN project are important to a second research project being conducted concurrently by BCCAT on the feasibility of expanding applicant flow studies to a broader range of post-secondary institutions.

The objectives for the PEN study and the resulting paper were to determine the present use of the PEN in the BC secondary and post-secondary systems; describe the use of a unique student identifier in two other jurisdictions, Quebec and Indiana; present options that would result in BC post-secondary institutions having a valid PEN attached to the official record of each applicant; and make recommendations about the use of the PEN in relation to the provincial goal of improved studies on student mobility and applicant flows. Key individuals were identified and interviewed in order to gather the information necessary to write the paper. Appendix A provides a complete listing of people who contributed information or provided referrals.

Interviewees provided considerable support for the value and desirability of assigning a valid PEN to every PSI applicant during the applicant phase. In terms of the feasibility of doing so, success would depend upon continued system-wide cooperation in addition to pursuing the potential for technical solutions that do not result in any delay in the institutional processing of applicants. The relevant legislation also needs to be considered in detail regarding the kinds of studies and reporting that would make use of the PEN. The data submission deadlines and the way in which batch submissions are submitted by the PSIs need to be addressed. Clearly there are more discussions and consultations needed in order to continue to move toward the goal of a PEN at the applicant phase and to build on the high level of support for such an initiative.

The following recommendations are being made as possible next steps to achieving the goal of a PEN at the applicant stage:

1) This paper should be submitted to the Research Committee and the Admissions Committee of BCCAT for review and approval.
2) The paper should then be brought to BCCAT's October meeting for review and approval.
3) Following recommendations made at the PASBC Steering Committee meeting held on July 28, 2004, the report should be discussed at the November 18 meeting of the BC Registrars' Association (BCRA) to determine next steps towards implementation.
4) Consideration should be given by the BCRA to form a subcommittee to address the technical and legal issues raised within this report and to consider options for moving towards universal application of the PEN at the applicant stage. The subcommittee should include representation from the Ministries of Education (MoE) and Advanced Education (AVED) and BCCAT.
5) The subcommittee should monitor the progress being made by Statistics Canada on the development of a national unique identifying number and its potential impact on the work in BC on the PEN.
6) The appropriate body should consider making recommendations to MoE and AVED based on the subcommittee's findings and conclusions.

Background

Over the past few years the Ministry of Education (MoE) and the BC Registrars Association (BCRA) have streamlined the means of validating PENs for students attending a provincial post-secondary institution (PSI). As well, the BCRA has voiced its support for what Registrars have called a "PEN on demand" approach. This term was used to describe how a valid PEN could be assigned for each individual upon application to a post-secondary institution. Currently PSIs attach PENs to a student record at a rate close to 99%; however, this unique identifier is often attached to a student record after the student has registered for courses and is no longer considered or coded as an applicant within the student record system.

A generally accepted definition of an applicant is someone who has submitted an application for admission to a PSI. Once an applicant has been accepted for admission and goes on to register for a course, the applicant becomes a registrant or a student or is given another name from the institutional nomenclature. Normally at this point in the process, a new status code for this student is assigned within the PSI student record system. The window of opportunity for system-wide reporting on applicants can be brief, and it depends upon the program the student has applied for and how the PSI processes applications to the program.

All K -12 students from BC secondary schools have PENs. PSIs have a space for the PEN on their application for admission forms and they receive PENs electronically from the MoE for Grade 12 graduates. The Registrar's office at each PSI matches the PEN with the official record it has created for each of its students. These matched PENs are then sent to the MoE for validation. The MoE returns an error report for the PSI to make any necessary corrections.

First-time PSI applicants from outside BC do not have a PEN, nor do those applicants who have been out of the BC K-12 public school system since 1993. For reasons that will be explored in more detail elsewhere in this paper, the process by which the PSI Registrar obtains a PEN for applicants without one often results in the PEN being attached to the official student record at the PSI after the student has already registered for courses and moved past the applicant phase of enrolment.

Institutional Registrars and those responsible for institutional research and analysis within the PSIs and government ministries universally recognize the benefits that can be realized through comprehensive validation of the PEN as a unique student identifier for applicants. There is a tacit understanding about the utility of using the PEN for studies and analysis and to assist in decisions that can help institutions with their program planning which in turn will help students.

The research potential of an unduplicated number for each student in the applicant phase of enrolment in the provincial system is attractive to many who are involved in the post-secondary sector, including the BCCAT, the BC Central Data Warehouse, The University Presidents Council and the Outcomes Working Group. Each sees opportunities for more meaningful studies of student mobility that can be based on tracking students by their PEN. With such agreement about the advantages of the universal use of the PEN, the challenge is to determine how to assign it to applicants at the time they apply.

Ministry of Education's Role in Assigning PENs

As noted earlier, PENs have been provided to students enrolled in the BC public K-12 system since 1993. The MoE introduced the nine-digit number to assist with province-wide research, strategic planning and day-to-day operations of school districts. At the time of the PEN's introduction in BC, the provinces of Alberta, Manitoba, Saskatchewan, Ontario, Quebec and Newfoundland were using similar unique student identifying numbers.

When the PEN was introduced, there were several benefits cited. Of primary importance was the need for the MoE to have timely and accurate data to determine appropriate levels of funding for districts, schools and programs. In addition, the PEN was intended to help students transfer academic records more efficiently, to provide students with easy access to their records when leaving and returning to the system and to help the Ministry with studies involving school dropouts. The 1988 Royal Commission on Education had noted a need to collect data on dropouts, and the creation of the PEN was in part a response to this recommendation.

Today, control of and authority for the PEN remains under the auspices of the MoE. Schools and school districts use Web service technology and a PEN Web application whenever a new student enrolls in a BC public school for the first time. The MoE returns the number online to the school or district.

Before the PEN was introduced in 1993 as an addition to the MoE information database, school districts had historically provided the MoE with information on enrolments to be used for transferring funds. Schools and districts regularly reported on numbers of students enrolled, differentiated by the various programs of study. The district offices and schools continue to provide the MoE with student data that includes the legal name, gender, place of birth, birth date, postal code, primary language spoken at home and the level of program/grade/participation.

All information provided to and by the MoE is regulated within the guidelines of the Freedom of Information and Protection of Privacy Act (FOIPOP) legislation. Under these guidelines individual students and their parents or guardians are advised about what personal information is collected and how it will be used. It is permissible under FOIPOP to compile summary student data without student consent as long as the individual student is not identified in any subsequent reporting.

Students in BC do not usually memorize their PEN and they are advised by the MoE that they are not required to provide the PEN to anyone for any purpose. Students are advised that they may leave blank any Web form or other request to provide their PEN. The MoE also advises students that no institution can deny or delay an application for admission if the student does not provide a PEN.

PSI Registrars are aware of the advice given to BC secondary students; however, in order to comply with a government goal of a PEN for every post-secondary student, the Web service application form available through the Provincial Application Service of BC (PASBC) and most institutional application for admission forms have a space for applicants to enter their PEN if they know it. PASBC has been provided with an algorithm by the MoE that enables the system to check the PEN submitted by the applicant to ensure it is valid; however, the PEN field on the application is not a mandatory field, and so the application is processed whether or not a PEN is

included. Counsellors and advisors in the secondary system inform students that their PEN will be provided by the MoE to each BC post-secondary institution to which the students apply.

A Permanent Student Record is maintained for every student within the BC public education system (K-12). School districts are required to retain a Permanent Student Record for 55 years after the student has withdrawn or graduated. The PEN is a permanent unique identifier within the Permanent Student Record.

Use of the PEN by Post-Secondary Institutions

Currently when a BC secondary school graduate decides to apply for admission to a provincial PSI, the application can be made directly to the institution or by using the Web service application provided by PASBC. Either way, the PSI is responsible for ensuring each of its students has a PEN.

An applicant to a provincial PSI who has been a BC secondary school student since 1993 will have a valid PEN in the MoE database. The Office of the Registrar at the provincial PSI where the student has applied is responsible for matching the applicant's official student record with the electronic data provided by the MoE and then attaching the valid PEN to that student record. PSIs match the MoE validated PENs in one of two ways. Depending on the technical capabilities of the institution, the PEN is either manually added to the appropriate individual student record, or it is automatically loaded through a computer-based process.

Applicants to provincial PSIs who are not in the MoE database and have not attended a school in the provincial K-12 system since 1993 do not have a valid PEN and require different processing by the PSI Office of the Registrar. In order to assign a valid PEN to applicants without one, the PSI Registrar provides electronic data about the applicant to the MoE to determine if the individual already has a number. If so, that number is validated by the MoE to the PSI Registrar. If there is no match found, a new PEN is assigned and confirmed by the MoE to the Registrar, who then attaches it to the appropriate, official student record at the PSI.

By the time this process is completed the applicant may have cancelled or declined admission or will have already registered for courses and thus would no longer be considered an applicant. In these cases no PEN number will be connected to the applicant record. PSI's may also submit the data file to the MoE for PEN validation after student registration has taken place. By submitting a file of registered students, the PSI will receive a PEN for registered students only, which in turn means the PEN will not be part of an applicant record.

Normally the MoE can process PEN requests from PSIs within two or three days, but there are reasons for variances in the turnaround time. One reason turnaround time can be delayed is the batch format by which the PEN is normally requested. The data provided by the PSI to the MoE to request valid PENs is usually sent by batch request. The batches contain many students, often more than a thousand. Universities batch their requests and independently submit the batches to the MoE. Colleges, university colleges and institutes send their batches of requests for valid PENs about three weeks before the compliance dates set by the provincial Data Warehouse. In either case, a large batch request puts stress on MoE's computer processing performance which can delay turnaround time. Turnaround time can also be delayed in cases where manual

interventions are required. Sometimes two different students will have identical data, perhaps the same name, birth date and gender. In these and other cases that fall outside the norm, human intervention is required and naturally this manual search takes more time.

There is a thoroughly understood imperative to do everything possible to avoid duplicate numbers. To look for duplicate records, the MoE uses an audit process and data merges. It diligently searches the student database that currently holds more than two million records before a new PEN is assigned. In addition to situations in which more than one student will have the same name and or the same birth date, students also stop and start their education, frequently with many years passing between registrations. During the passage of time, students change names, postal codes and levels of study. A person's gender can also change. These scenarios illustrate how matching students to validate a PEN is a process that is complex and consequently can take time to complete with assured accuracy.

The Use of a Similar Unique Student Identifier in Quebec and Indiana

To fully appreciate the scope of the PEN number and its potential applications in BC, the researcher explored how a similar number is used elsewhere. Two different systems to compare and contrast are in place in Quebec and Indiana.

Quebec

Within the education system of Quebec, there is careful attention paid by educational institutions and government to the orderly conduct of business practices. For more than 20 years a unique student identifier called a *code permanente* has been used. The number is assigned to all applicants regardless of what level of school they begin in the Quebec system. The majority of students in Quebec receive their number when they first enroll at elementary school. People moving into Quebec and enrolling in any level of public educational institution receive a *code permanente* when they apply to enter an elementary or secondary school or when they apply to a college or university.

The *code permanente* is a 12-character alphanumeric series that identifies the name, birth date and gender within the first 10 characters. The final two characters are used for apparent duplicates. In cases where an applicant has the same name, birth date and gender, the education ministry will assign 01, 02, 03 and so forth as duplicates come in. To date, the highest the ministry has had to go with a potential duplicate was 08.

When applicants to PSIs do not have a *code permanente,* the institution completes an application on the student's behalf and submits the application to the ministry. The ministry checks the student data against the database, and a number is assigned to those who need one. The PSI does not delay processing of the application for admission while the *code permanente* is being assigned. Through Web service technology, the validated code is returned to the PSI within 24 hours.

Within the Quebec education system, the *code permanente* is considered essential. It is used for a variety of purposes that include all forms of student identification on transcripts and applications and for checking academic history. It is also widely used for research, and it is described as

critical to the success of the extensive student tracking system that provides Quebec institutions with valuable data, including reports on student mobility.

Indiana

The state of Indiana Department of Education introduced the Student Test Number (STN) in the fall of 2002. Assigning an STN was declared as a state requirement. All students attending any public or private K-12 level accredited school or corporation have, since 2002, been required to have an STN. About 2,000 public and private schools are currently providing student data to the STN system.

An algorithm assigns the unique identifier number to students in the K-12 system. The nine-digit number identifies the school and the expected graduation year of the student followed by a random numerical sequence. The goal in Indiana was exclusively to come up with a unique identifier for students. Indiana's Department of Education stresses that the STN should not be seen as having any inherent or substantive meaning. In Quebec the numbering system enables more analysis by identifying student name, age and gender while in Indiana the number is limited to school and expected graduation year, so there is less opportunity for using the number alone for statistical analysis.

Since 2002 the STN has been shared with other state departments, such as the vocational division and the welfare branch. The use of the student record in Indiana (as elsewhere within the United States) is protected by the Family Education Rights and Privacy Act (FERPA), similar legislation to FOIPOP which protects the confidentiality of student records in BC It should be noted that in several U.S. states the Social Security Number is used as a unique student identifier and for employment related statistics.

Post-secondary institutions in Indiana are not required to use the STN although use of the number may be included in an electronic transcript project that is now in the planning stage. As a result, there is questionable utility of the STN for statewide research that involves both the secondary and post-secondary systems. However the situation in Indiana seems to be changing. Compliance with the recent No Child Left Behind Act requires more data performance overall from Indiana's student record systems.

Observations on Other Jurisdictions

Attempting to employ a unique student identifier across a given educational system is a common goal throughout the U.S. states and Canadian provinces. Caution is in order, however, when comparing or contrasting the success in achieving this goal. There are significant differences between educational systems that must be recognized in order to make a meaningful comparison.

Some of the factors that consistently differ among provincial and state educational systems include the organizational structure of the secondary and post-secondary system itself, the role of government within the system, the level of autonomy individual institutions enjoy, the degree to which independent student information system architecture is permitted and the emphasis placed on research and data collection. These and other factors comprise the unique system culture, and it is within this culture that the effort is made to identify the most appropriate way to establish a unique student identifier.

Quebec has been following its practice for assigning unique student identifier numbers for two decades within a system culture that has a history of uniformity and has changed little in organizational structure throughout that time. In Quebec, students make the transition from elementary to secondary school and from there to college and finally on to university. The BC model of transfer between colleges and degree-granting institutions is not found in the Quebec system. Indiana has a network of public and private post-secondary institutions but, unlike BC's well-developed transfer system and the role of BCCAT, Indiana does not enjoy the benefit of articulation committees or a coordinated transfer system to assist students moving credits between institutions. Indiana's STN is not on the transcript nor is it used consistently throughout the state's post-secondary system.

In Indiana, applicants apply for admission directly to the school of their choice. In Quebec, those who want to go to a university can apply directly to the university itself; however, applicants to Quebec colleges commonly use a private regional service, which charges students a fee for its services. For the fee, students provide a priority list of programs and colleges within their region, and the consortium finds the student a place and arranges admission.

Although there seems to be little for BC to learn from the Indiana STN system as it presently exists, the way in which the *code permanente* is assigned is worth noting. The Quebec practice of validating the unique identifier for every applicant, regardless of what level that person begins from elementary to graduate school, is consistent with the BC practice. Currently the K-12 system in BC uses what is essentially the same process to assign a number to every newcomer to a district school. As well, the PSIs are responsible for ensuring that a validated PEN is part of each student's official record. One notable difference between the two systems is that Quebec universities and private admission consortia are able to consistently obtain a valid *code permanente* within 24 hours of receiving an application for admission from a student without a number, while in BC the turnaround time can be considerably longer depending on the factors previously noted.

Issues to be Considered Regarding the Assignment of the PEN During the Application Phase of Student Enrolment

A number of important issues need to be addressed if BC were to try to implement a PEN for every applicant across all PSIs in the public post-secondary system.

A need for unduplicated headcount data on applicants

As noted earlier in this paper, currently within BC 99% of registered students have a valid PEN on their official record at their PSI. Although the precise figure is not known, a considerably smaller percentage of applicants have a valid PEN recorded on their official PSI student record. Universal application of the PEN for all applicants must occur before meaningful data on applicant flows among institutions in the provincial system using unduplicated headcount data can be accurately measured.

Variation in admissions policies, practices and processes

Although admission business practices vary by program type within institutions, enrolment management professionals commonly identify four distinct phases of being a PSI student. During the first phase prospective applicants are identified. The second "recruitment" phase involves prospects applying for admission, being admitted and paying fees. The third phase, usually called retention, involves students progressing through their chosen program and registering for courses as continuing students until they graduate. The final phase is the alumni phase where a relationship between the PSI and graduate is sustained.

The admission steps within the recruitment phase can take as little as a few minutes for programs where admission is essentially automatic. Conversely, the admission process can go on for months in programs where there is competitive entry or complex admission decision procedures. Although Registrars are generally supportive of a system that will assign a PEN number during the applicant phase, they do not want to see application processing delayed for the sole purpose of obtaining a valid PEN.

For competitive and limited entry programs such as degree or technology programs, there is sufficient time to obtain a PEN for applicants without one. However, in programs of short duration, such as contract or cost recovery programs, continuing education courses and other types of flexible entry programs, applicants essentially apply and register concurrently, leaving insufficient time to obtain a PEN during the applicant phase.

Institutional autonomy and diversity

The ever evolving BC public post-secondary system is currently comprised of 27 institutions with 27 different mission statements. Among these institutions there are markedly different program mandates and a variety of methods for admitting students. The autonomy of institutions within the system combined with the multiple missions of those institutions inevitably lead to wide differences in operating practices and strategic priorities. With such great diversity within the system, caution should be used with any initiative that requires change to institutional business practices in order to achieve a system-wide goal.

Levels of technical preparedness

The varying levels of technical preparedness among the 27 institutions deserve mention. Where some institutions invest in a robust administrative computer support budget, other institutions can sometimes find it a struggle to comply with what some might consider a routine request for data. Over recent years administrative data managers within the BC post-secondary system have experienced considerable new demands on their resources as a result of technological change. Technological readiness at the institutional level should be specifically determined if there is a province-wide expectation of compliance with any solution that involves technical support from the PSI.

Consideration of FOIPOP

Before proceeding toward a province-wide goal that involves all public sector students and their confidential records, it must be recognized that there are many pieces of legislation involved in

the BC secondary and post-secondary education systems. Acts such as the School Act, the College and Institute Act, and the University Act along with FOIPOP legislation and the Electronic Transactions Act must all be taken into consideration when considering the use of the PEN for inter-sector and inter-institutional studies. Assigning a valid PEN at the applicant phase is consistent with current admission practices insofar as adherence to the legislation is concerned; however, the FOIPOP Commissioners Office expects to be consulted regarding any planned studies and/or reports that involve the use of the PEN. Furthermore, issues perceived as involving the electronic submission of PEN data to third parties, must be resolved.

Findings and Observations: Options for Moving Forward

An overriding theme that emerged from the consultations that were undertaken to prepare this paper was agreement on the value of confirming a valid, unduplicated PEN for all applicants. Ideally BC could simply adopt the Quebec methodology to accomplish this goal, but the two educational systems are structured differently so the methods cannot be simply transferred from one to the other. However, one potentially transferable method worth noting is how the unique identifier is assigned to applicants. In Quebec, an applicant to a college submits the form for admission to a regional clearing house and a university applicant submits the form directly to the university. In either case, immediately upon receipt of the application form the clearing house or university applies on the student's behalf to the ministry for the unique *code permanente*, which is returned and affixed to the applicant's record within 24 hours.

In the current BC post-secondary environment, the Registrar's Office at each PSI employs business practices designed to ensure that the institution complies with provincially mandated PEN requirements. Universities initiate the PEN validation process during the applicant phase but students can be registered before a valid PEN is finally assigned to their PSI record. College and institute applicants can be admitted and register for courses without providing a validated PEN because the timing for meeting PEN validation requirements is coordinated to coincide with provincial data submission dates of the Data Warehouse.

In the absence of a compelling reason for Registrars to include PEN validation as a required step for every new application, what are the options for moving forward toward the desired goal of a valid PEN for every applicant?

One option may be found through the technological solutions being developed through BCcampus. By early 2005 BCcampus plans to house a portal-based hub of student information system connectors. The system is currently being designed with a pilot group of Registrars and Directors of Information Systems from Camosun College, College of the Rockies, University College of the Fraser Valley and Kwantlen University College. The student information system connectors will enable instant transactions for students attending any of the four institutions. The ability for BCcampus to facilitate student transactions by establishing connectors with institutions could be extended to the MoE. Such an arrangement could enable applicants using PASBC to obtain an immediate PEN validation before their application is passed along to the PSI. The Registrars would need to manage a separate process to obtain a valid PEN for students who apply directly to the PSI.

On July 28, 2004, members of BCcampus met with the former PASBC Steering Committee, a group that includes Registrars from the various post-secondary sectors and representatives of BCCAT, the MoE and the Ministry of Advanced Education (AVED). The potential for and issues associated with this portal connector between BCcampus and the MoE was explored at this meeting along with a second option described below.

With the technical capabilities of BCcampus yet to be introduced, a second option to consider is a decentralized approach to establish Web service between each of the 27 PSIs and the MoE. This option, inspired by the Quebec system, would require the PSIs and the MoE to agree on an acceptable Web standard format and operating standards. This option would require PSI Registrars to submit PEN requests to the MoE upon receipt of an application from a student. There are critical issues involved in setting up such a data exchange network. Key personnel from the PSIs, the MoE and the Data Warehouse would need to further explore the feasibility of this option. One key consideration is the timing of a PEN at the application stage and how PSIs would avoid duplicate numbers for students applying to multiple institutions.

The culture of the BC public post- secondary system places value on demonstrated institutional benefits before it tends to support proposals that are expected to have system-wide advantages. Complete and effective ongoing compliance with system-wide initiatives depends to a large degree upon examples of how the cost of compliance will result in value to the institution.

The emphasis on enrolment management within PSIs is intended to optimize institutional resources and ensure that enrolment targets are achieved. Enrolment management relies upon the use of student information. This information would be enhanced by studies on inter-institutional applicant flows and student mobility. Such studies could provide PSIs with valuable data for planning and managing program delivery, two essential aspects of an enrolment management model.

The cost to achieve the goal of a valid PEN for every applicant and the amount of work required at each institution will depend upon the option that is ultimately chosen to address this issue. As well, the 27 PSIs within BC are not equal in terms of budget or computer processing capability. The cost for any technical solution will require a readiness evaluation for each institution.

As a final observation it is important to highlight the differences among PSI admission practices and to note how these practices influence when and how the PEN is assigned. Universities admit new students to competitive entry degree programs. There are exceptions in the continuing education division or in other branches of the university that manage alternative programming. At colleges, university colleges and some institutes, in addition to admitting students to both competitive and open admission degree-level programs, students are also admitted to developmental programs, career and technical programs and trades programs, each of which use different admission procedures. Other provincial PSIs offering specialized programs have put in place practices that are designed to serve those particular types of programs. Program differences and the resulting business practice differences among institutions should be taken into account when considering how or when a PEN can be assigned sooner in the application process.

Conclusions and Next Steps

Throughout the consultations that contributed to this report, there was unanimity about the value of a assigning a valid PEN to every PSI applicant during the applicant phase. Thus, there appears to be considerable support for the desirability of assigning a PEN at the applicant phase. In terms of the feasibility of doing so, success will depend upon continued system-wide cooperation in addition to pursuing the potential for technical solutions that do not result in any delay in the institutional processing of applicants.

The relevant legislation also needs to be considered in detail regarding the kinds of studies and reporting that would make use of the PEN. The data submission deadlines and the way in which batch submissions are submitted by the PSIs need to be addressed. Clearly there are more discussions and consultations needed in order to continue to move toward the goal of a PEN at the applicant phase and to build on the high level of support for such an initiative.

The following recommendations are being made as possible next steps to achieving the goal of a PEN at the applicant stage:

1. This paper should be submitted to the Research Committee and the Admissions Committee of BCCAT for review and approval.

2. The paper should then be brought to the October 1 meeting of BCCAT for review and approval.

3. Following recommendations made at the PASBC Steering Committee meeting on July 28, 2004, the report should be discussed at the November 18 meeting of the BCRA to determine next steps towards implementation.

4. Consideration should be given by the BCRA to form a subcommittee to address the technical and legal issues raised within this report and to consider options for moving towards universal application of the PEN at the applicant stage. The BCRA subcommittee should include representatives from the MoE, AVED and BCCAT.

5. The subcommittee should monitor the progress being made by Statistics Canada on the development of a national unique identifying number and its potential impact on the work in BC on the PEN.

6. The appropriate body should consider making recommendations to MoE and AVED based on the subcommittee's findings and conclusions.

APPENDIX A

The following people provided the information used in the preparation of this report. Some were interviewed in person, some responded to e-mail and others offered useful referrals to sites, people and other sources of information.

- BCcampus: Mark Ardiel, Randy Bruce, Lars Fajersson, Graeme McNeil
- BCCAT: Devron Gaber (A special acknowledgement for the steady guidance, clarity of purpose and comprehensive editing skills that were needed to complete this paper.)
- James Cooke (Capilano College) provided information on the Quebec system.
- Data Warehouse Committee and Outcomes Working Group: Lisa Domae (North Island College)
- Indiana Department of Education: Laura Taylor
- Ministry of Advanced Education: Kevin Perrault, Thorne Won
- Ministry of Education: Ross Brain, Brian Jonker, Caroline Ponsford
- Ministry of Management Services: Liz Bicknell
- Registrars: Trevor Braem (Okanagan University College), Sueling Chang (Vancouver Community College), Bill Cooke (University College of the Fraser Valley), Jody Gordon (Kwantlen University College), Ron Heath (Simon Fraser University), Jim Hooten (North Island College), Fred Jacklin (Malaspina University-College), Brian Loptson (Northwest Community College), Dennis Mayberry (University College of the Cariboo), Kate Ross (Camosun College), Brian Silzer (University of British Columbia), Chris Sinhuber (College of the Rockies), Cled Thomas (University of Victoria)
- The University Presidents' Council: Blair Littler

In addition to the feedback provided by this contact group, Web pages offered valuable background information. A report entitled "When You're Talking School Data Systems: Caveat Emptor" [1] provided a useful perspective on the Indiana system as well as an overview of the general issues regarding the use of unique identifiers in the U.S.

[1] Michael Huffman. www.doe.state.in.us/technology/schooldata1.html